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## ABSTRACT

This longitudinal study was designed to compare the academic, personal, and family characteristics of those teacher candidates persisting and not persisting through teacher preparation and the early years of classroom teaching. The candidates' (N=551) personal, family, and academic characteristics were collected upon commencement of teacher preparation. Seven years later the candidates were classified by degree of persistence as follows: not certified as teachers (21 percent), certified but not teaching (28 percent), part-time teachers (22 percent), and full-time teachers (29 percent). The candidates' gender, major, initial extent of assurance about teaching, and time at which they decided to become teachers were found to be associated with their degree of persistence in the transition from student to teacher but not their level of academic aptitude, level of basic academic skills, and self-rating of their expected effectiveness as future teachers. Relationships between findings from the present study and findings from the National Longitudinal Survey of teacher attrition were discussed, and several implications for effective teacher recruitment were drawn including the conclusion that the "making of teachers" appears to be a high risk and costly business when only 29 percent of a class of candidates have made a successful transition to full-time teaching 7 years after the commencement of teacher preparation. (Contains 21 references.) (Author/ND)

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## Running Head: CANDIDATE CHARACTERISTICS AND ATTRITION

Entering Personal and Academic Characteristics of a Longitudinal  
Sample of Persisting and Nonpersisting Teachers Seven Years After  
Commencement of Teacher Preparation

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### Abstract

This longitudinal study was designed to compare the academic, personal, and family characteristics of those teacher candidates persisting and not persisting through teacher preparation and the early years of classroom teaching. The candidates' (N = 551) personal, family, and academic characteristics were collected upon commencement of teacher preparation, and then seven years later the candidates were classified by degree of persistence as follows: not certified as teachers (21%), certified but not teaching (28%), part-time teachers (22%), and full-time teachers (29%). The candidates' gender, major, initial extent of assurance about teaching, and time at which they decided to become teachers were found to be associated with their degree of persistence in the transition from students to teachers but not their level of academic aptitude, level of basic academic skills, and self-ratings of their expected effectiveness as future teachers. Relationships between findings from the present study and findings from the National Longitudinal Survey of teacher attrition were discussed, and several implications for effective teacher recruitment were drawn including the conclusion that the "making of teachers" appears to be a high risk and costly business when only 29% of a class of candidates have made a successful transition to full-time teaching seven years after the commencement of teacher preparation.

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**Entering Personal and Academic Characteristics of a Longitudinal  
Sample of Persisting and Nonpersisting Teachers Seven Years After  
Commencement of Teacher Preparation**

The quality of K-12 education in the next several decades will be greatly influenced by the profession's ability to attract and retain capable teacher candidates in a competitive world. The ability of the profession to compete for talented candidates is questioned in part because some prior research findings indicate the teaching profession has been less effective than other professional fields in attracting and retaining talented candidates in the past (e.g., Chapman, 1983; Heyns, 1988; Schlechty & Vance, 1981). Teaching in our society has been typically viewed as a less than ideal career, especially by higher socio-economic, well-educated families. Also, when higher social class individuals are attracted to teaching, they are more likely to leave the profession in early or mid-career (Bloland & Shelby, 1980). Further accentuating this problem, large percentages of individuals trained as teachers never enter the profession, and many certified candidates delay entry into teaching and/or take breaks from teaching of a year or more after becoming teachers (National Center for Educational Statistics, 1994).

Increasingly, conditions in our society indicate that the competition for talented youth is becoming more intense. Concomitant with current educational reform efforts the business community is experiencing its own reform and accountability efforts because of the need to compete in a world economy. Furthermore, social changes in our country are providing expanded employment opportunities for talented women candidates who in the past have been a major source of talent for the teaching profession (James, 1991). In commenting upon the educational implications of this changing attractiveness of other professions for capable female candidates, Sedlak and Schlossman (1987) stated: "No single subject is more central to the history of the teaching profession than the changing role of women in American society" (p. 123).

Many believe that most teacher candidates are attracted to teaching by market factors such as the need for candidates and the availability of competitive salaries (Murnane, Singer, & Willett, 1989; Ochsner & Solomon, 1979; Weaver, 1983); others emphasize that most individuals choose occupations by seeking congruence between one's own personality and the work environment within a particular occupation (Holland, 1973; Walsh & Huston, 1988). Whether one is a strong advocate of one or neither of these models of what motivates those who aspire to teach, few doubt that the various professions in our nation are being influenced by dramatic market and social changes. The interaction of these factors leading to changes in the professions is well illustrated by Sedlak and Schlossman's (1987) discussion of the teaching profession as historically being a source of upward mobility for individuals in our society. They noted, for example, that in past decades both males and females gained social status when entering the teaching profession. Past teacher candidates in this country predominately came from the lower social classes and from rural communities, and individuals from upper social classes, if attracted to the profession, more frequently left the profession (Carlson, 1961). For many similar individuals today, entering the teaching profession no longer provides a means of upward mobility.

A recent national longitudinal study of individuals prepared to be teachers indicated that teacher attrition had decreased in the last decade, that attrition had not decreased the ability and qualifications of those teaching, that former teachers were more likely to have left advantaged rather than problem schools, and that teaching is a high mobility profession characterized by high rates of attrition, delayed job entry, job re-entry, and by the perception of many in the profession that teaching is a stepping stone to other careers. High mobility in the profession between 1976 and 1986 was evident in that approximately 25% of those completing teacher training never entered the teaching field. Nearly 33% of those teaching in 1986 first began teaching four or more years after completing their training. About 45% of those who started teaching some time after 1976 were no longer teaching in 1986. And almost 33% of those teaching in 1986 had taken a break of a year or more from teaching at some time in their teaching career (Heyns, 1988).

Heyns (1988) reported that attrition from teaching was most likely to occur for male, higher socio-economic secondary teachers during their first three or four years of teaching. She also noted that those leaving teaching had scored higher on standardized tests, but the continuing teachers had earned higher grades in both high school and college and had completed more graduate level training and earned more advanced degrees. Attrition rates were found to be higher for teachers in private and advantaged public schools than for those teaching in public and problem schools. Many who had left teaching were found to be satisfied or very satisfied with teaching (58%), and many of those teachers who were satisfied with teaching when leaving hoped to return to teaching at some future time (44%).

In attempting to predict attrition from as well as recruitment to the teaching profession, Weaver (1983) argued that an individual's marketability is the foremost influence. He notes, for example, that highly capable teachers are more likely to find more lucrative employment out of the profession. In contrast, Chapman (1983) developed a theoretical model suggesting that attrition from teaching and the quality of the teaching talent pool is influenced by a number of factors. His research indicated that teacher candidates' personal characteristics, initial commitment to teaching, quality of educational preparation, successful integration into teaching, career satisfaction, and the appropriateness of their first employment placement concomitant with individuals' marketability are associated with attrition from and entry to the teaching profession (Chapman, 1984; Chapman & Green, 1986; Chapman & Huteson, 1982).

In summary, some more recent research findings indicate that a number of factors are associated with teacher persistence and that attrition doesn't always result in a less talented pool of teachers (Heyns, 1988; Marso & Pigge, 1991; Pigge & Marso, 1992). However, we have a particularly limited understanding of the academic and personal characteristics of those teacher candidates who do or do not persist through teacher training, those candidates who do or do not become certified as teachers, and those candidates who become certified but are unable to or choose not to obtain teaching positions, those who choose to teach part-time or are unable to obtain full-time teaching positions, and those who become full-time teachers. The present study represents an effort to address this particular lack of knowledge about the characteristics of those candidates who have varied degrees of success in their transition from students to teachers.

More specifically, this study was designed to compare the entering academic, personal, and family attributes of a longitudinal sample of teacher candidates who were unsuccessful in entering or who had experienced varied levels of success in entering the teaching profession seven years after the commencement of their teacher preparation. The following questions are illustrative of those investigated in the present study: 1) What percentages of beginning teacher candidates fail to obtain teacher certification? become certified but do not teach? teach but do not have a full-time position? become full-time teachers? 2) Are teacher candidates with higher academic abilities, as indicated by entering levels of academic aptitude and basic academic skills, more successful than those with lower academic abilities in making the transition from students to teachers? 3) Is the degree of teacher candidates' success in making the transition from students to teachers associated with their characteristics when beginning teacher preparation, such as having teachers in their immediate family? elementary or secondary major? the time when they decided to become a teacher? the extent of their assurance about wanting to teach? their anticipated degree of success as a future teacher? gender? the level of their parents' education?

#### Methods and Procedures

Data was collected from a longitudinal sample of teacher candidates at two points in time. Upon the commencement of teacher preparation the following data were collected from the candidates: American College Test (ACT) scores, Comprehensive Test of Academic Skills (CTBS) scores, gender, presence or absence of teachers in their immediate family, parental levels of education, when they decided to become teachers, the degree of assurance about their decision to teach, self-ratings of their

expected effectiveness as future teachers, and whether they were elementary or secondary school majors. Seven years after commencement of training, through personal or family contact, examination of university academic and alumni records, and reviews of the Ohio State Department of Education initial and annual certification records, the candidates were classified as not being certified as teachers, being certified but not teaching, being part-time teachers, and being full-time teachers.

This data collected from the teacher candidates were analyzed using a series of chi square two-way contingency table comparisons between the more and less successful candidates relative to the degree of their success in making the transition from students to teachers. The column classification for each contingency table was the four categories of the candidates' degree of success in making the transition from students to teachers. Namely, these degree of transition categories formed seven years after the commencement of teacher training were: 1) candidates who did not become certified as teachers, 2) candidates who became certified as teachers but did not teach, 3) candidates then part-time teachers with less than two years of full-time teaching (e.g., substitute teachers, short-term teacher replacements, etc.), and 4) candidates then full-time teachers with two or more years of full-time teaching experience.

The row categories for the chi square contingency tables were composed of the various academic, personal, and family characteristics of the candidates as follows: five dichotomous classifications of gender (male and female), major (elementary and secondary), teachers in the candidates' immediate family (yes and no), high and low ACT composite scores (20 or lower and 21 or higher), high and low CTBS composite scores (179 or lower and 180 or higher), and high and low self-ratings of expected effectiveness as future teachers (good to unusually good and outstanding to truly exceptional); and two three-category classifications consisting of three levels of assurance about becoming a teacher upon commencement of teacher preparation (very certain, certain, and uncertain to very doubtful), and time at which the decision to teach was made (elementary grades, high school years, and after high school graduation).

The 551 subjects consisted of all teacher candidates who began their first required teacher preparation course at a large midwestern university during the 1985 school year. These teacher candidates were predominantly female (79%), elementary (54%) majors, very certain or almost certain about teaching (86%), from families with teachers in the present or prior generation (60%), children of parent or parents not having four-year college degrees (67%), from somewhat larger families (46% with three or more siblings), second or later birth order (66%), with some or considerable prior teaching-like experiences (61%), very confident about becoming unusually good to truly exceptionally effective future teachers (78%), from rural (33%) or suburban (54%) high schools of moderate to small size (61% with high school graduating classes of 300 or less), and most had decided to teach when in their elementary years or when in their high school years (71%) rather than after high school graduation.

## Results

Analysis of the gathered data indicated that, after seven years from the commencement of teacher preparation, 433 (79%) of the 551 candidates had persisted through teacher preparation at this institution and had become certified as teachers; whereas 118 (21%) of the candidates had not become certified as teachers. Of the total group of candidates, 153 (28%) became certified as teachers but chose not to teach or were unable to find employment as teachers during the approximate five years after their graduation. Approximately one in two (49%) of the original candidates were nonpersisters who had not made the transition to teaching as either part-time or full-time teachers seven years after the commencement of their teacher preparation.

Of the 280 (51%) candidates making the transition from students to teachers, nearly one-half (118) had made just a limited transition to teaching as they were part-time teachers who seven years after the commencement of teacher preparation had acquired less than two full-time years of teaching experience. Just 162 (29%) of the 551 candidates appeared to have made successful, complete transitions

from students to teachers in that they were full-time teachers who had acquired two or more years of full-time teaching seven years after the commencement of teacher preparation.

The chi square analyses indicated that the degree of the candidates' success in making their transitions to teaching was found to be associated with the candidates' gender, major, initial assurance about becoming a teacher, and when the candidates first decided to become teachers. Conversely, the candidates' degree of success in making their transitions from students to teachers was not found to be associated with the candidates' academic ability as measured by the ACT, the CTBS, and the candidates' own ratings of their expected effectiveness as future teachers. Additionally, the presence of teachers in their immediate family was not found to be associated with the degree of the candidates' success in their transitions from students to teachers.

Table 1 presents a frequency and percentage cross tabulation of candidate ability and transition level categories. None of the three chi square values for these classifications are statistically significant suggesting that neither the candidates' measured academic aptitude and academic skills nor their own perceived effectiveness as future teachers was associated with the candidates' degree of success in making their transitions from students to teachers. The frequency cells formed from the candidates' degree of transition categories and the ACT classification resulted in a  $\chi^2$  of 1.02,  $p = .795$ ; the CTBS classification resulted in a  $\chi^2$  of 0.896,  $p = .826$ ; and the candidates' self-rated expected effectiveness as a future teacher resulted in a  $\chi^2$  of 6.10,  $p = .107$ . None of these frequency percentage differences for the four transition classifications exceeded five percent except for the not certified difference for the future effectiveness self ratings. Eight percent more of the not certified candidates had rated their future effectiveness as teachers below that of their cohorts.

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Insert Table 1 about here  
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Four of the five selected candidates' personal attribute classifications were found to be associated with the candidates' degree of success in making their transitions from students to teachers. The frequency cells formed from the degree of successful transition from students to teachers and the gender classifications resulted in a  $\chi^2$  of 22.77,  $p < .001$ , indicating that the gender of the candidates was associated with the degree of their transition to teaching (see Table 2). These cell frequencies indicate that the male candidates were as likely to have made a successful transition to full-time teaching (30%) as their female cohorts (29%), but the males were more likely not to be teaching at all and were less likely to be part-time teachers. The female candidates were relatively equally distributed among the four degree of transition categories with fewer in the two nonteaching categories (45%) compared to the male candidates (64%), but within the two teaching categories more of the female candidates were in the part-time teaching category (26%) than the male candidates (6%). These gender differences in cell frequencies might suggest that the male candidates may have been somewhat less committed to teaching in not preferring to remain in the profession as part-time teachers if full-time positions were not available and/or that the male candidates may have been more able to enter other occupational fields if full-time teaching positions were not readily available to them.

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Insert Table 2 about here  
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The candidates with elementary school majors rather than secondary majors were more successful in making their transitions from students to teachers ( $\chi^2$  of 25.09,  $p < .001$ ). The proportions of elementary (20%) and secondary (22%) majors not securing certification were nearly identical, but of those certified but not teaching proportionately more were secondary majors (37%) than elementary majors (20%). Approximately 60% of the elementary majors were teaching part-time or full-time; whereas just 42% of their secondary cohorts were either part-time or full-time teachers (see Table 2).

Like the male candidates, proportionately fewer of the secondary majors were part-time teachers (15%) as compared to the elementary majors (28%). This suggests that the secondary majors, like the male candidates, may have been less committed to teaching and/or that when full-time teaching jobs were not readily available, they might have had more other occupational options which they took advantage of. The gender and major factors in this sample are undoubtedly somewhat confounded as most males in the sample were also secondary majors; however, a close examination of the frequencies within these two classifications suggests that both gender and major effects are present to some degree.

The frequency cells formed by the candidates' transition categories and the degree of their assurance about becoming teachers upon commencement of teacher preparation classifications also revealed a statistically significant difference ( $\chi^2$  of 27.87,  $p < .001$ ). The candidates very certain about having made their decisions to become teachers upon the commencement of teacher preparation were more successful in making the transition from students to full- or part-time teachers (60%) than were their cohorts almost certain (45%) and uncertain or very doubtful about their decisions to teach (36%). The patterns of frequencies within the two teaching categories, part-time and full-time teachers, revealed that close to twice as many of those candidates very certain as compared to those uncertain about teaching had made the transition to teaching. The certified but not teaching transition category revealed almost no difference in frequencies among those candidates who had been more or less assured about teaching: very certain 27%, almost certain 27%, and not certain 31%. In contrast, the not certified as teachers category revealed large frequency differences with 13% of the very certain, 28% of the almost certain, and 33% of the uncertain about the decision to teach not becoming certified (see Table 2). More than twice as many of the two less certain groups of candidates compared to those candidates very certain about their decision to be teachers upon commencement of teacher preparation failed to become certified as teachers.

The frequency cells formed from the degree of transition categories and the time at which the candidates decided to become teachers classifications also revealed a statistically significant difference ( $\chi^2$  of 24.21,  $p < .001$ ). Approximately just one of three (36%) of the candidates deciding to become teachers after their high school graduation were teaching seven years after the beginning of their teacher preparation; whereas over one-half (57%) of the candidates deciding to become teachers during their elementary or secondary school years were teaching. More than one-third (34%) of the candidates deciding to teach in their elementary or high school years were full-time teachers, but less than one-fifth (19%) of those deciding to teach after their high school years were full-time teachers seven years after the commencement of teacher preparation (see Table 2).

The presence of teachers in the immediate family of the candidates was not found to be associated with their degree of success in making the transition from students to teachers. The pattern of frequencies formed from the presence of teachers in the candidates' family resulted in a  $\chi^2$  of 3.25,  $p = .354$ . None of the percentage differences within the four transition categories exceeded five percent. Evidently, the presence or absence of teachers in one's immediate family, although it may encourage or discourage a candidate to consider teaching as a career (e.g., 60% of this sample had teachers in their family), does not influence one's persistence in becoming a teacher after commencement of teacher preparation.

#### Summary, Discussion, and Possible Generalizations

The longitudinal follow-up of 551 teacher candidates of a large midwestern university teacher preparation program revealed that seven years after the commencement of teacher preparation just 29% of the candidates had made successful transitions to full-time teaching, 22% had made limited transitions in that they were teaching part-time, 28% became certified as teachers but did not teach, and 21% had not become certified as teachers. The degree of the candidates' success in making the transition from students to teachers was found to be related to their gender, major, initial degree of assurance about becoming a teacher, and the time at which the candidates first decided to become teachers. The degree of successful transition to teaching, however, was not found to be associated with

levels of the candidates' academic aptitude, basic academic skills, their own perceived effectiveness as future teachers, and the presence or absence teachers in the immediate family of the candidates.

The collected data indicated that the candidates' academic abilities as assessed upon commencement of teacher preparation by the American College Test, the Comprehensive Test of Basic Skills, and self-ratings of their future success as teachers were not related to the degree of their success in making the transition from students to teachers. This finding would suggest that candidate attrition from the commencement of teacher preparation through the early years of teaching does not necessarily reduce the quality of the remaining teacher pool and lends some support to other recent longitudinal studies reaching a similar conclusion (e.g., Heyns, 1988; National Center for Educational Statistics, 1994; Pigge & Marso, 1992).

Proportionately the male and female candidates in this sample had comparable levels of success in making the transition to full-time teaching (30%); however, more of the males were not teaching at all (64%) and fewer were part-time teachers (6%) seven years after the commencement of teacher preparation. The related female candidates' percentages were full-time teachers, 29%; not teaching, 45%; and part-time teachers, 26%. This data suggests that the male candidates may have been less committed to teaching, may have had more other job opportunities available to them, and/or that they perceived other fields of employment to be preferable to part-time teaching. A larger proportion of the secondary major candidates were certified as teachers (37%) but not teaching as compared to their elementary major counterparts (20%); whereas a smaller proportion of the secondary majors were part-time teachers (15%) than were their elementary cohorts (28%). This elementary-secondary pattern is similar to that of the gender classification, and to a certain extent it likely reflects the fact that most males in the sample were also secondary majors. The Weaver's (1983) attrition model, as previously noted, predicts greater attrition for secondary teachers because of their more marketable subject area specialties; therefore, this marketability factor, rather than the suggested possible difference in commitment to teaching, may better explain the marked differences within the part-time teaching category for the gender and major classifications of the candidates.

The teacher candidates' initial assurance about becoming teachers also was found to be related to the degree of their transition from students to teachers as had been noted in prior research (Chapman & Green, 1986). A larger proportion of the candidates who reported being very certain about becoming teachers at the outset of teacher preparation were teaching seven years later (60%) than were their less certain (45%) and their uncertain cohorts (36%). Conversely, of those candidates not securing teacher certification, a smaller proportion had been very certain about teaching (13%) than less certain (28%) or uncertain (33%) about teaching. Relatedly, the candidates who had decided to become teachers in either their elementary or high school years were more likely to be teaching (56%) seven years after the commencement of teacher preparation than those candidates deciding after high school graduation to become teachers (36%). Nearly one-third (32%) of those candidates deciding to become teachers after high school graduation did not become certified to teach compared to 16% of those deciding in the elementary years and 18% in the secondary years. The assurance of becoming teachers and the time of decision when deciding to become teachers classifications revealed similar frequency patterns, suggesting that the two factors may be related to one another. About 2 out of 3 of the candidates uncertain about their decision to teach at the commencement of teacher preparation as well as those having made the decision to teach after high school graduation were not teaching seven years after the commencement of teacher preparation.

The present finding of about one-half of the candidates not teaching approximately five years after graduation from a teacher preparation program is similar to that of a study of Michigan teacher candidates wherein 46% of the candidates were not teaching six years after having begun teacher preparation (Murnane, 1987). These findings of high incidences of apparent changes in teacher candidates' decisions about teaching also are supported by data from the National Longitudinal Survey of the high school class of 1972 as well as other more recent findings as previously noted (Heyns, 1988; National Center for Education Statistics, 1994). For example, Nelson (1985) indicated that only 25% of

those individuals in a national sample who actually became teachers had indicated teaching to be their career in high school, and almost 80% of those high school pupils who had planned to be teachers never became teachers. Nelson's (1985) study also linked changes in the decision to teach to the abilities of the high school pupils. Less able high school students, unsure of their future plans, were found to more likely to indicate teaching as a career, even though most did not become teachers; thus leading many researchers to believe that the abilities of those entering the teaching profession are much lower than those planning to enter other professions.

In summary, the findings from the present study lend support the following generalizations related to teacher attrition:

1. The rate of teacher candidate attrition through teacher preparation and the early years of teaching is high. The attrition incidence for the present sample of candidates was approximately 50% during the seven-year duration of the study.
2. Candidate self-perceived effectiveness as a future teacher and measures of academic aptitude and academic skills are not predictors of teacher attrition during teacher preparation and the early teaching years.
3. Male and secondary teacher candidates are more likely not to enter the profession of teaching, and they are less likely to remain in teaching as part-time teachers than are their female and elementary cohorts.
4. Teacher recruitment practices targeting post-high school students not having decided to teach is not likely to be very productive, for as many as two-thirds of such candidates are not likely to actually become teachers after having begun teacher preparation.
5. The presence of teachers in the immediate family appears to encourage individuals to select teaching as a career but does not appear to influence teacher candidates' persistence through teacher preparation and the early classroom teaching years.
6. Those teacher candidates almost certain or very certain about becoming teachers upon the commencement of teacher preparation are almost twice as likely to actually teach than those uncertain about their decision to become teachers. Nearly two out of three teacher candidates in the present sample who were uncertain about teaching upon the beginning of teacher preparation were not teaching seven years later. In other words, those teacher recruitment efforts that focus upon undecided high school or university level candidates are not likely to result in many candidates persisting through teacher preparation and the early teaching years.
7. The "making of teachers" appears to be a high risk business as well as a costly process to society, for just 29% of the present class of teacher candidates had made a successful transition to full-time teaching seven years after the commencement of teacher preparation.

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Table 1.  
Frequency and Percentage Cross-Tabulations of Ability and Transition Categories

Ability Classifications		Transition Categories												
		Full-time Teaching				Part-time Teaching				Certified		Not Certified		* Total
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	$\chi^2$
ACT	Hi	54	32	40	24	47	28	29	17	170	48	1.02	.795	
	Lo	50	27	43	24	54	30	36	20	183	52			
CTBS	Hi	74	28	60	22	77	29	58	22	269	50	0.896	.826	
	Lo	84	31	57	21	73	27	55	20	269	50			
Effective	Hi	62	29	52	24	65	30	35	16	214	39	6.10	.107	
	Lo	100	30	64	20	85	26	79	24	328	61			

\* Frequencies (n's) vary because all data were not available for all candidates.

Table 2  
Frequency and Percentage Cross-Tabulations of Personal and Transition Categories

Personal Classifica- tions	Transition Categories											
	Full-time Teaching		Part-time Teaching		Certified Not Teaching		Not Certified		* Total		$\chi^2$	p
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
Gender:												
Male	35	30	7	6	43	37	31	27	116	21	22.77	.000
Female	127	29	111	26	110	25	87	20	435	79		
Major:												
Elem.	90	32	80	28	58	20	57	20	285	54	25.09	.000
Sec.	64	27	35	15	89	37	52	22	240	46		
Assurance:												
Very	90	35	66	25	70	27	33	13	259	47	27.87	.000
Almost	55	26	41	19	58	27	59	28	213	39		
Not	17	22	11	14	24	31	26	33	78	14		
First Interest:												
Elem.	41	34	28	23	32	27	19	16	120	22	24.21	.000
Sec.	91	34	61	23	68	25	48	18	268	49		
Post Hi.	30	19	27	17	52	33	51	32	160	29		
Teachers Family:												
Yes	99	30	77	23	86	26	66	20	328	60	3.25	.354
No	63	29	40	18	67	30	51	23	221	40		

\* Frequencies (n's) vary because all data were not available for all candidates.



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